

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

<p>Appellants: Riou et al.</p> <p>Title: PRINTING SYSTEM CONDENSOR</p> <p>Appl. No.: 10/698511</p> <p>Filing Date: 10/31/2003</p> <p>Examiner: Fidler, Shelby Lee</p> <p>Art Unit: 2861</p>	<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="padding: 2px;"><b><u>CERTIFICATE OF FACSIMILE TRANSMISSION</u></b></td></tr><tr><td style="padding: 2px; font-size: small;">I hereby certify that this paper is being facsimile transmitted to the <b>United States Patent and Trademark Office</b>, Alexandria, Virginia on the date below.</td></tr><tr><td style="padding: 5px; text-align: center;"><i>Todd A. Rathe</i></td></tr><tr><td style="padding: 2px; text-align: center;">(Printed Name)</td></tr><tr><td style="padding: 5px; text-align: center;"> </td></tr><tr><td style="padding: 2px; text-align: center;">(Signature)</td></tr><tr><td style="padding: 5px; text-align: center;"> </td></tr><tr><td style="padding: 2px; text-align: center;">(Date of Deposit)</td></tr></table>	<b><u>CERTIFICATE OF FACSIMILE TRANSMISSION</u></b>	I hereby certify that this paper is being facsimile transmitted to the <b>United States Patent and Trademark Office</b> , Alexandria, Virginia on the date below.	<i>Todd A. Rathe</i>	(Printed Name)		(Signature)		(Date of Deposit)
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I hereby certify that this paper is being facsimile transmitted to the <b>United States Patent and Trademark Office</b> , Alexandria, Virginia on the date below.									
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**BRIEF ON APPEAL**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**1. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.

## **2. Related Appeals and Interferences**

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to Appellants or Appellants' patent representative.

## **3. Status of Claims**

Claims 1-39 were originally pending in the application. In response to the first substantive Office Action mailed on July 14, 2005, Appellants amended claim 33 to correct an erroneous claim dependency. In response to an office action mailed on June 22, 2006, claims 15, 16 and 23-26 were canceled; claims 1 and 21 were amended and claims 40-43 were added. In response to a final office action mailed on January 3, 2007, claim 6 and 41 were amended. Such amendments were entered. On May 3, 2007 a Notice of Appeal was filed. On June 29, 2007, a first appeal brief was filed. On September 13, 2007, the final office action dated January 3, 2007 was withdrawn and a new office action was mailed. This is an appeal from the Office Action mailed on September 13, 2007 rejecting claims 1-14, 17-22 and 27-43. The present appeal is directed to claims 1-14, 17-22 and 27-43, i.e., all of the presently pending claims that stand rejected in this application.

## **4. Status of Amendments**

This appeal is in response to a non-final office action. All amendments to date have been entered.

## **5. Summary of Claimed Subject Matter**

Claim 1 is directed to a printing system (10) comprising:

an ink dispenser (16) configured to deposit ink upon a print medium (12) (page 3, lines 17-page 4 line 7); and

a condenser (54, 154, 254) configured to condense vapor into a condensate (page 4, lines 25-30; page 9, lines and 5-11; page 10, lines 14-25);

a receptacle (88) configured to collect the condensate, wherein the receptacle is perforated to permit a portion of the condensate to evaporate, wherein

the receptacle is removably coupled to a remainder of the system and wherein the receptacle includes:

- an inlet through which the condensate flows into the receptacle; and
- a closing portion (90) movable between an inlet open position and an inlet closing position (page 6, line 25-page 7 line 7).

Claim 6 depends from claim 1 and further recites means (90) for automatically moving the closing portion to the inlet closing position when the receptacle is disconnected from the remainder of the printing system. (page 6, line 32 – page 7, line 3).

Claim 27 is directed to a printing system (10) comprising:

- means (16) for depositing ink upon a print medium (page 3, lines 17-page 4 line 7);

- means (54, 154, 254) for condensing vapor to form a condensate (page 4, lines 25-30; page 9, lines and 5-11; page 10, lines 14-25);; and

- means (88) for storing the condensate, wherein the means for storing includes an inlet and means for automatically occluding the inlet when disconnected from a remainder of the printing system (page 6, line 25-page 7 line 7)..

Claim 30 is directed to a method of printing ink upon a medium. The method comprises:

- depositing ink upon the medium (page 3, lines 17-page 4 line 7);
- heating the deposited ink to create a vapor;
- condensing the vapor into a condensate (page 4, lines 25-30; page 9, lines and 5-11; page 10, lines 14-25);
- collecting the condensate in a first receptacle (88) (page 6, line 25-page 7 line 7).; and
- absorbing at least a portion of the condensate into a first absorption member (92) within the first receptacle (88) (page 7, lines 8-15).

Claim 41 depends from base claim 1 and intervening claims 9 and 40. Claim 9 recites that the condenser (254,) includes a thermoelectric module. Claim 40 recites that the condenser includes a plurality of fins (267) thermally coupled to the thermoelectric module. Claim 41 recites that the plurality of fins converge from an inlet side proximate to the ink dispenser and have a first dimension to an outlet side distant the ink dispenser and having a second smaller dimension (page 10, lines 28-31; Figure 3).

Claim 42 depends from claim 1 and recites at the condenser (254) includes a plurality of fins (267) converging from an inlet side proximate the ink dispenser (16) and having a first dimension to an outlet side distant the ink dispenser (16) and having a second smaller dimension (page 10, lines 28-31; Figure 3).

## **6. Grounds of Rejection to be Reviewed on Appeal**

The issues on appeal are **(1)** whether the Examiner erred rejecting claim 6 under 35 USC 112, first paragraph; **(2)** whether the Examiner erred in rejecting Claims 1, 6, 10, 12, 13, 18-20, 22, 27-30, 33-36, 39 and 43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa); **(3)** whether the Examiner erred in rejecting claims 2-4, 7-9, 21, 31 and 32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson); **(4)** whether the Examiner erred in rejecting claim 5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,085,055 (Shin); **(5)** whether the Examiner erred in rejecting claims of 11 and 38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,512,900 (Sakai); **(6)** whether the Examiner erred in rejecting claim 14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,203,138 (Hirabayashi); **(7)** whether the Examiner erred in rejecting Claims 17 and 37 under 35 U.S.C. § 103(a)

as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,357,854 (Igval); (8) whether the Examiner erred in rejecting claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,269,002 (Azar).

## **7. Argument**

### **I. Legal Standards**

#### **A. Law of Enablement**

Claim 6 is rejected under 35 USC § 112, first paragraph which states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

#### **B. Law of Obviousness**

Claims 1-14, 17-22 and 27-43 are rejected under 35 U.S.C. § 103(a), which states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The legal standards under 35 U.S.C. § 103(a) are well-settled. Obviousness under 35 U.S.C. § 103(a) involves four factual inquiries: 1) the scope and content of the prior art; 2) the differences between the claims and the prior art; 3) the level of

ordinary skill in the pertinent art; and 4) secondary considerations, if any, of nonobviousness. See Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 U.S.P.Q. 785, 787-88 (Fed. Cir. 1984). “[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” In re Fritch, 972 F.2d 1260, 1265, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992).

As noted by the Federal Circuit, the “factual inquiry whether to combine references must be thorough and searching.” McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 60 U.S.P.Q. 2d 1001 (Fed. Cir. 2001). Further, it “must be based on objective evidence of record.” In re Lee, 277 F.3d 1338, 61 U.S.P.Q. 2d 1430 (Fed. Cir. 2002). The teaching or suggestion to make the claimed combination must be found in the prior art, and not in the appellant’s disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990). “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to [use] that which the inventor taught against its teacher.” Lee (citing W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983)). Teaching away from the claimed invention is a strong indication of non-obviousness and an improper combination of references. U.S. v. Adams, 383 U.S. 39 (1966).

**II. The Examiner's rejection of Claim 6 under 35 USC § 112, first paragraph should be reversed because claim 6 does not recite a single means function absent any other elements.**

Claim 6 depends from claim 1 and additionally recites means for automatically moving the closing portion to the inlet closing position when the receptacle is disconnected from the remainder of the printing system.

In rejecting claim 6 under 35 USC 112, first paragraph, the Examiner refers to MPEP 2164.08(a) which recites:

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

However, claim 6 does not simply recite a single means. In contrast, claim 6 depends from claim 1 which recites multiple other elements such as a dispenser, a condenser, a receptacle, an inlet and a closing portion. Accordingly, the rejection of claim 6 as being of undue breadth is improper and should be reversed.

**III. The Examiner's Rejection of Claims 1, 6, 10, 12, 13, 18-20, 22, 27-30, 33-36, 39 and 43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) Should Be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa so As to Include Every Limitation of Each of the Claims.**

A. Claim 1

Claim 1 recites a printing system having a condenser configured to condense vapor into a condensate and a receptacle configured to collect the condensate. The receptacle is removably coupled to a remainder of the system. The receptacle additionally includes an inlet through which the condensate flows into the receptacle and a closing portion movable between an inlet open position and an inlet closing position.

Neither Brinkly nor Nakazawa, alone or in combination, disclose or suggest a printing system having a condenser and a removable receptacle receiving condensate from the condenser. As acknowledged by the Examiner, Brinkly does not disclose a receptacle that receives condensate from the condenser and that is removable. As a result, the Examiner attempts to rely upon Nakazawa by asserting that Nakazawa discloses a receptacle that is removably coupled to a remainder of the system. The Examiner goes on to assert that:

it would have been obvious to a person of ordinary skill in the art to utilize a cartridge disclose by Nakazawa et al. into Brinkly's invention. One motivation for doing so, as taught by Nakazawa et al., if you provide any cartridge with a waste ink absorbing function that can be recycled simply and easily (col. 2, lines 45-47).

(Office Action dated September 13, 2007, page 3).

However, the ink cartridge of Nakazawa has nothing to do with storing condensate. The receptacle of Nakazawa is NOT a condensate receiving receptacle. In contrast, the ink cartridge disclosed by Nakazawa is for a completely different purpose: receiving waste ink resulting from the priming for cleaning of the recording head 9 (see Figure 6 and column 6, lines 7-24 of Nakazawa). The "waste ink" referred to in the Nakazawa is not condensate, but is waste ink resulting from the priming of the print head. Neither Brinkly nor Nakazawa provide any motivation or suggestion for replacing vessel 116 of accumulator 102 of Brinkly with the ink cartridge of Nakazawa. Replacing accumulator 102 of Brinkly with an ink cartridge would make little sense.



Moreover, even assuming, arguendo, that would somehow be obvious to combine the teachings of Brinkly and Nakazawa, the resulting hypothetical combination would still fail to result in a printing system having a removable condensate receiving receptacle. In contrast, the resulting hypothetical combination would, at best, constitute the print engine 22 of Brinkly additionally including the ink cartridge 2 of Nakazawa for supplying ink and for storing waste ink resulting from the priming of the print head of print engine 22 of Brinkly. Accumulator 102 would remain as taught by Brinkly.

In contrast to following what is ACTUALLY taught by Nakazawa, the Examiner appears to be selectively picking and choosing features from multiple references while specifically ignoring the actual context or environment in which such features are disclosed. In particular, the Examiner ignores the actual context of Nakazawa.

Once again, Nakazawa discloses a removable receptacle for receiving waste ink, not condensate from a condenser. The Examiner fails to provide any support or motivation for its selective picking and choosing features from references while selectively ignoring other features or the context of the features in the disclosing references. Rather, it appears that the Examiner is selectively picking and choosing features while ignoring others using Appellants' own disclosure as a blueprint for such subjective "decisions". As noted above, taking into account the entire disclosure or "four corners" of the documents relied upon, one of ordinary skill in the art will be led to produce a combination entirely different from that alleged by the Examiner. Accordingly, the rejection of claim 1 is improper and should be reversed. The rejection of Claims 6, 10, 12, 13, 18-20, 22 and 43, which depend from claim 1, should be reversed for the same reasons.

B. Claim 27

Claim 27 recites a printing system which includes means for condensing vapor to form a condensate and means for storing the condensate, wherein the means for storing includes an inlet and means for automatically occluding inlet when disconnected from a remainder of the printing system.

Neither Brinkly nor Nakazawa, alone or in combination, disclose or suggest a printing system having means for storing the condensate, wherein the means for storing includes an inlet and means for automatically occluding inlet when disconnected from a remainder of the printing system. In contrast, accumulator 102 of Brinkly is not even configured to be disconnected from a remainder of the printing system.

In acknowledgment of this clear deficiency of Brinkly, the Examiner attempts to additionally rely upon Nakazawa. However, the Examiner is attempting to mix apples and oranges. As noted above, the disclosure of Nakazawa has nothing to do with "means for storing condensate." Rather, Nakazawa merely discloses an ink cartridge that supplies ink to a print head and receives "waste ink," ink ejected by the print head during priming of the print head. Accordingly, it would not be obvious to one of ordinary skill in the art to replace the accumulator 102 of Brinkly with the ink cartridge of Nakazawa. Following the actual teachings of Nakazawa, one or more new skill in the art would at most be led to utilize the ink cartridge of Nakazawa in the print engine 22 of Brinkly. The Examiner's attempt to selectively pick and choose features from Nakazawa and selectively add them to Brinkly appears to be based upon impermissible hindsight reasoning using Appellants' own disclosure as a blueprint. Accordingly, the rejection of claim 27 should be reversed. The rejection of claims 28 and 29, which depend from claim 27, should be reversed for the same reasons.

C. Claim 30

Claim 30 recites a method of printing ink upon a medium. The method includes heating deposited ink to create a vapor and condensing vapor into a condensate. The method further includes collecting the condensate in a receptacle and absorbing at least a portion of a condensate into an absorption member within the receptacle.

Neither Brinkly nor Nakazawa, alone or in combination, disclose or suggest condensing a vapor into a condensate and absorbing at least a portion of a

condensate into an absorption member within a receptacle. In acknowledgment that Brinkly fails to disclose who absorbing condensate into an absorption member within a receptacle, the Examiner attempts to additionally rely upon Nakazawa by asserting that one of ordinary skill in the art, following Nakazawa, would provide Brinkly with "an ink cartridge with a waste ink absorbing function." (Office Action dated September 13, 2007, page 3).

However, as noted above, the "waste ink" discussed in Nakazawa is NOT condensate, but is ink that it's been primed from the print head of print engine 22. Nakazawa does not satisfy the deficiencies of Brinkly. Nakazawa says nothing about absorbing collected condensate.

Moreover, as also noted above, if one of ordinary skill in the art would lead a to somehow add the print cartridge of Nakazawa to Brinkly, this added print cartridge of Brinkly would also simply collect and absorb ink that has been primed from the print head of print engine 22, NOT condensate 104.

The Examiner's attempt to selectively pick and choose features from Nakazawa and selectively add them to Brinkly appears to be based upon impermissible hindsight reasoning using Appellants' own disclosure as a blueprint. Accordingly, the rejection of claim 30 should be reversed. The rejection of claims 33-36 and 39, which depend from claim 27, should be reversed for the same reasons.

**IV. The Examiner's Rejection of claims 2-4, 7-9, 21, 31 and 32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa and Anderson so As to Include Every Limitation of Each of the Claims.**

Claims 2-4, 7-9, 21 and claims 31 and 32 depend from claims role one and 30, respectively. The rejection of claims 2-4, 7-9, 21, 31 and 32 should be reversed

for the same reasons discussed above with respect to claims 1 and 30. Anderson fails to satisfy the deficiencies of Brinkly and Nakazawa.

**V. The Examiner's Rejection of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,085,055 (Shin) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa, Anderson and Shin so As to Include Every Limitation of Each of the Claims.**

Claim 5 depends from claims 1. The rejection of claim 5 the same reasons discussed above with respect to claim 1. Neither Anderson nor Shin satisfies the deficiencies of Brinkly and Nakazawa.

**VI. The Examiner's Rejection of claims of 11 and 38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,512,900 (Sakai) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa, Anderson and Sakai so As to Include Every Limitation of Each of the Claims.**

Claims 11 and 38 depend from claims 1 and 30, respectively. The rejection of claims 11 and 38 should be reversed for the same reasons discussed above with respect to claims 1 and 30. Neither Anderson nor Sakai satisfy the deficiencies of Brinkly and Nakazawa.

**VII. The Examiner's Rejection of claim 14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,203,138 (Hirabayashi) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa, Anderson and Hirabayashi so As to Include Every Limitation of Each of the Claims.**

Claim 14 depends from claims 1. The rejection of claim 14 should be reversed the same reasons discussed above with respect to claim 1. Neither Anderson nor Hirabayashi satisfies the deficiencies of Brinkly and Nakazawa.

**VIII. The Examiner's Rejection of Claims 17 and 37 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,357,854 (Igval) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa, Anderson and Igval so As to Include Every Limitation of Each of the Claims.**

Claims 17 and 37 depend from claims 1 and 30, respectively. The rejection of claims 17 and 37 should be reversed for the same reasons discussed above with respect to claims 1 and 30. Neither Anderson nor Igval satisfy the deficiencies of Brinkly and Nakazawa.

**IX. The Examiner's Rejection of claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,269,002 (Azar) Should be Reversed Because It Would Not Be Obvious to Modify Brinkly based upon Nakazawa, Anderson and Azar so As to Include Every Limitation of Each of the Claims.**

Claims 40-42 depend from claim 1. The rejection of claims 40-42 should be reversed for the same reasons discussed above with respect to claim 1. Neither Anderson nor Igval satisfy the deficiencies of Brinkly and Nakazawa. The rejection of claims 41-42 should be reversed for the following additional reasons.

Claims 41 and 42 each ultimately depend from claim 1. Claim 41 recites a condenser having a plurality of fins that converge from an inlet side proximate any dispenser to an outlet side distant ink dispenser. Claim 42 recites that the condenser includes a plurality of fins converging from an inlet side proximate the dispenser to an outlet side distant of the ink dispenser.

Neither Brinkly, Nakazawa, Anderson nor Azar, alone or in combination, disclose or suggest a condenser having fins that converge from an inlet side proximate in the dispenser to an outlet side to send any dispenser. All be Examiner acknowledges that neither Brinkly, Nakazawa nor Anderson disclose such a condenser. As a result, the big Examiner attempts to additionally rely upon Azar by asserting that:

Azar discloses a plurality of fins (plate fans 101) that are thermally coupled to a heat producing electronic component (col. 1, lines 8-13 and Figs. 10A and 10B).

(Office Action dated September 13, 2007, page 15).

However, fins 101 of Azar are **not** on a condenser. In contrast, fins 101 of Azar are on a heat sink. A heat sink is not a condenser and a condenser is not a heat sink. Accordingly, the rejection of claims 41 and 42 is improper as being based upon impermissible hindsight reasoning using Appellants' own disclosure as a blueprint.

### **Conclusion**

In view of the foregoing, the Appellants submit that **(1)** claim 6 is not properly rejected under 35 U.S.C. 112, first paragraph; **(2)** claims 1, 6, 10, 12, 13, 18-20, 22, 27-30, 33-36, 39 and 43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and are therefore patentable; **(3)** claims 2-4, 7-9, 21, 31 and 32 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and are therefore patentable; **(4)** claim 5 is not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,085,055 (Shin) and is therefore patentable; **(5)** claims of 11 and 38 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent

6,512,900 (Sakai) and are therefore patentable; **(6)** claim 14 is not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,203,138 (Hirabayashi) and is therefore patentable; **(7)** claims 17 and 37 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of US Patent 6,357,854 (Igval) and are therefore patentable; **(8)** claims 40-42 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,397,488 (Brinkly) in view of US Patent 6,281,911 (Nakazawa) and further in view of U.S. Patent No. 6,176,563 (Anderson) and US Patent No. 6,269,002 (Azar) and are therefore patentable.

**Summary**

For the foregoing, it is submitted that the Examiner's rejections are erroneous, and reversal of the rejections is respectfully requested.

Dated this 20<sup>th</sup> day of February, 2008.

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**CLAIMS APPENDIX**

1. (Previously Presented) A printing system comprising:  
an ink dispenser configured to deposit ink upon a print medium; and  
a condenser configured to condense vapor into a condensate;  
a receptacle configured to collect the condensate, wherein the  
receptacle is perforated to permit a portion of the condensate to evaporate, wherein  
the receptacle is removably coupled to a remainder of the system and wherein the  
receptacle includes:  
an inlet through which the condensate flows into the receptacle; and  
a closing portion movable between an inlet open position and an inlet  
closing position.
2. (Original) The system of Claim 1, wherein the condenser includes:  
a conduit having a conduit interior; and  
a coolant source connected to the conduit and configured to supply  
coolant into the conduit interior at a temperature so as to condense the vapor along  
the conduit.
3. (Original) The system of Claim 2, wherein the coolant source is  
configured to supply a liquid at a temperature so as to condense the vapor along the  
conduit.
4. (Original) The system of Claim 2, wherein the coolant source is  
configured to supply a gas at a temperature so as to condense the vapor along the  
conduit.
5. (Original) The system of Claim 2, wherein the condenser includes a fin  
thermally coupled to the conduit.
6. (Previously Presented) The system of Claim 1, further comprising  
means for automatically moving the closing portion to the inlet closing position when  
the receptacle is disconnected from the remainder of the printing system.

7. (Original) The system of Claim 2, wherein the coolant source includes:  
a pump configured to move fluid; and  
a cooling device configured to cool the fluid to the temperature.
8. (Original) The system of Claim 7, wherein the cooling device includes  
a compressor.
9. (Original) The system of Claim 1, wherein the condenser includes a  
thermoelectric module.
10. (Original) The system of Claim 1 including a blower configured to  
move the vapor along the condenser.
11. (Original) The system of Claim 10 including:  
a duct proximate the condenser and having an exhaust opening; and  
a filter between the condenser and the exhaust opening.
12. (Original) The system of Claim 1, wherein the receptacle includes a  
condensate-absorbing material within the receptacle.
13. (Original) The system of Claim 12, wherein the condensate-absorbing  
material is removable from the receptacle.
14. (Original) The system of Claim 12, wherein the condensate-absorbing  
material comprises a foam.
15. (Canceled)
16. (Canceled)
17. (Original) The system of Claim 1, wherein the receptacle includes a fill  
indicator configured to indicate a volume of the receptacle that is filled with  
condensate.
18. (Original) The system of Claim 1, wherein the ink dispenser includes  
an inkjet printhead.

19. (Original) The system of Claim 1 including a media handling system configured to transport individual sheets of material relative to the ink dispenser.

20. (Original) The system of Claim 19, wherein the media handling system is configured to handle sheets of material having a minor dimension less than 9 inches.

21. (Previously Presented) The system of Claim 19, wherein the media handling system is configured to stack the individual printed upon sheets.

22. (Original) The system of Claim 1 including a heater configured to heat the deposited ink, whereby vapor is produced.

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Original) A printing system comprising:  
means for depositing ink upon a print medium;  
means for condensing vapor to form a condensate; and  
means for storing the condensate, wherein the means for storing includes an inlet and means for automatically occluding the inlet when disconnected from a remainder of the printing system.

28. (Original) The system of Claim 27 including means for storing includes means for evaporating a portion of the condensate while the condensate is being stored.

29. (Original) The system of Claim 27 including means for heating the deposited ink, whereby vapor is formed.

30. (Original) A method of printing ink upon a medium, the method comprising:

depositing ink upon the medium;  
heating the deposited ink to create a vapor;  
condensing the vapor into a condensate;  
collecting the condensate in a first receptacle; and  
absorbing at least a portion of the condensate into a first absorption member within the first receptacle.

31. (Original) The method of Claim 30 including circulating a fluid through a thermally conductive conduit having a condensing surface to cool the condensing surface to a temperature to condense the vapor.

32. (Original) The method of Claim 30 including powering a thermoelectric module having a cool portion and a hot portion, wherein the cool portion is thermally coupled to a condensing surface along which the vapor is condensed.

33. (Previously Presented) The method of Claim 30 including evaporating a portion of the condensate within the first receptacle.

34. (Original) The method of Claim 30 including replacing the first absorption member with a second absorption member.

35 (Original) The method of Claim 30 including replacing the first receptacle with a second receptacle when at least a portion of the first receptacle is filled with condensate.

36. (Original) The method of Claim 30 including sending the first receptacle at least partially filled with the condensate to a collection entity for recycling or disposal of the condensate.

37. (Original) The method of Claim 30 including sensing an amount of condensate within the first receptacle.

38. (Original) The method of Claim 30 including directing the vapor across a condensing surface and through a filter.

39. (Original) The method of Claim 30, wherein the step of depositing ink includes ejecting ink from an inkjet printhead upon the medium.

40. (Previously Presented) The system of claim 9, wherein the condenser includes a plurality of fins thermally coupled to the thermoelectric module.

41. (Previously Presented) The system of claim 40 wherein the plurality of fins converge from an inlet side proximate the ink dispenser and have a first dimension to an outlet side distant the ink dispenser and having a second smaller dimension.

42. (Previously Presented) The system of claim 1, wherein the condenser includes a plurality of fins converging from an inlet side proximate the ink dispenser and having a first dimension to an outlet side distant the ink dispenser and having a second smaller dimension.

43. (Previously Presented) The system of claim 1 further comprising one or more conduits configured to direct all of the condensate from the condenser to the receptacle.

**EVIDENCE APPENDIX**

There is no evidence previously submitted under 37 C.F.R. §§ 1.130, 1.131 or 1.132 or other evidence entered by the Examiner and relied upon by Appellant in this appeal. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(ix) are satisfied.

**RELATED PROCEEDINGS APPENDIX**

There are no decisions rendered by a Court of the Board in a proceeding identified in the Related Appeals and Interferences section. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(x) are satisfied.